

COLORADO DEPARTMENT OF HEALTH
Division or Section of Water Quality Control

1186161 - R8 SDMS

INTER-OFFICE COMMUNICATION

TO : Sharon Metcalf

DATE : May 27, 1980

FROM: Fred Matter

SUBJECT: Rico Argentine Mining Company
Dolores County

Enclosed please find the following -

1. WQCD Enforcement Data Report
2. Copy of permit
3. Memo dated May 20, 1980, Shukle to Metcalf - Compliance Schedule
4. Memo dated May 20, 1980, Shukle to Metcalf - List of Violations
5. IOC of May 6, 1980, May to Hinman - DMR violations
6. Letter dated 9/13/79, Matter to Jahnke - Items of corrections to be done
7. Letter dated 5/5/80, Jahnke to Matter - Answer to 9/13/79
8. Memo dated 10/3/78, Plog to File
9. Memo dated 1/10/79, Plog to May - Enforcement samples collected
10. Memo dated 1/11/79, Pete Mars - Dates observing seepage
11. DMRS: 4/1/79 to 7/1/79
7/1/79 to 10/1/79
1/1/80 to 4/1/80
12. Correspondence regarding ownership of Rico Argentine Mining Company.

Please prepare notice of violation and cease and desist order as noted. If you have any questions, contact Bob Shukle or me.

FM:ef

Enclosures

cc - District Engineer

Signature

WQCD ENFORCEMENT DATA REPORT - 1

Name of discharger Rico Argentine Mining Company (facility)
Crystal Exploration and Production Company (owner)
If a corporation, name and title of responsible person.

O. L. Jahnke (agent)
General Manager

Mailing address P.O. Box 158
Rico, Colorado 81332

Type of facility froth-flotation base-precious metal mill and mine
The mill and mine are inactive at this time but permit
is purposely being maintained in active status.

County Dolores

Descriptive location of facility north of Rico and adjacent to the
Dolores River

State waters affected Dolores River

Date and method of report of violation by operator (if any)
3 in 30 Zn - 9/18/78, 9/25/78, 10/2/78; 30 day avg.)possibly a seepage disc.)

Memo from Pete Mars 1/11/79 - 8 days of seepage observed.

If not reported, describe method of discovery

DMR 1-1/4-1-80 - no report of flow, number of exceptions, frequency of
analysis, sample type and May 6, 1980 memo from Stanley V. May.

DMR 7-1/10-1-79 - Cu - daily maximum; 4-1/7-1-79 - Zn - daily maximum and 30 day avg.

3 in 30 - May 1979

WQCD ENFORCEMENT DATA REPORT - 2

Dates of Inspection

Parties present, title or association

Pete Mars observed seepage from ponds (Jan. 11, 1979 mem); Researcher
Dennis Plog observed seepage and took samples (9/10/78, 9/25/78, 10/2/78) Engineering
(5/4/79, 5/22/79, 5/31/79) Aide A

Description of discharge or violation - (attach diagrams, sample reports, narratives, photos, etc.)

1. Seepage at 002 - refer to Pete Mars memo
2. Enforcement sample violations - Zn (1978)
3. DMR violations - Cu, Zn, improper reporting
4. Enforcement sample violations - Zn, Hg (1979)

Dates on which violations can be established, with brief summary of the evidence to support each.

See data and memos

WQCD ENFORCEMENT DATA REPORT - 3

Indications that operator did or did not have knowledge of discharge.

See attached

Effect on receiving waters; evidence of environmental damage.

Uncertain of damage - not determined

Other possible witnesses who might provide additional information
(include phone number if possible)

If permit - NPDES number - CO-0029793
Date issued - 6/3/76
Expiration date - 12/31/80
Location of discharge point - 002 - last pond prior to Dolores River
Receiving waters - Dolores River
Permit sections believed violated - Part 1.A.3 effluent violations
Part 1.A.6 Disc. from unauthorized point (see page)
Part 1.B. Monitoring reports improper
If no permit - Point of discharge -
Receiving waters -
Statute or regulation believed violated -

Previous enforcement actions or violations by this discharger

Spill from cyanide heap leach in mid-1970's

Remedial actions recommended,

Compliance program - see attached IOC

Comments

Via letter of 9/13/79 an attempt was made to correct the problem
informally but items have not been met.

Submitted by: Robert J. Shukle

Date: May 20, 1980

SUMMARY OF RATIONALE
RICO ARGENTINE MINING COMPANY
RICO, COLORADO
PERMIT NO.: CO-0029793

Rico Argentine Mining Company has stated its intention to reopen an inactive^S froth-flotation base-precious metal mill and some supporting mines in a telephone memo received by EPA on October 23, 1975. The Company had previously filed an NPDES application with most inadequate information on July 21, 1975. However, my discussions with Mr. Orvil Jahnke, Manager, in August, 1975, revealed no intent to open the mill in the near future. Hence, the application was held as pending until recently.

The attached permit was prepared based upon the standard analysis, i.e., determining appropriate effluent limits based upon the controlling factor, Colorado Water Quality Standards, or the appropriate BPCTCA definition. Colorado WQS applied were those effective June 19, 1974. BPCTCA was established in 40 FR 51722-51748, November 6, 1975, for the appropriate Ore Mining and Dressing Subcategories. The attached permit is limited by a combination of both of these constraints, depending upon the parameter, the receiving stream, and the type of discharge. Table A summarizes the basis of each effluent limit in the attached permit. Attachments A, B, C, and D, provide supporting documentation.

Additional conditions were established disallowing any discharge from the heap leaching operation. (BPCTCA)

Conditions were also established requiring stability and seepage analysis on new and existing tailings disposal facilities (25-8-501(7) C.R.S. 1973). This is particularly necessary in this situation due to the history of failures of tailings at this facility and due to the pollutorial character of those tailings. Remedial measures will be required as determined to be necessary following the required stability investigations by a qualified registered professional engineer in the State of Colorado.

Richard D. Andrews
November 24, 1975

Crystal Exploration and Production Company
O. L. Jahnke, General Manager
P.O. Box 158
Rico, CO 81332

COLORADO DEPARTMENT OF HEALTH
Water Quality Control Division
4210 East 11th Avenue
Denver, Colorado 80220
(303)+320-8333, Ext. 3231

Rico Argentine Mining Co.
Mining Division of Crystal Exploration
& Production Company - NPDES PERMIT #CO-002979

APPLICATION FOR TRANSFER
AND ACCEPTANCE OF TERMS
OF NPDES PERMIT

I, Rico Argentine Mining Co. Mining Division of Crystal, am the new
Exploration and Production Company
owner of the following facility:

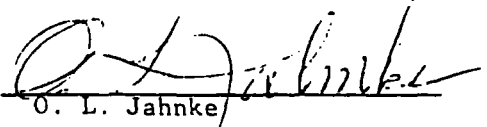
Mill located approximately one (1) mile upstream of Town of Rico
on Silver Creek, the Blaine Tunnel and St. Louis Tunnel.

I hereby apply for transfer to me of NPDES Permit No. CO- 0029793
which was issued to the previous owner. I have reviewed this permit and accept
its terms in full.

Please print or type

Name, address, and telephone number of the owner of the facility producing
discharge.

A. Owner Crystal Exploration and Production Company
B. Facility Name Rico Argentine Mining Company
C. Mailing Address P. O. Box 158
D. City Rico, D. State Colorado
E. County Dolores F. Zip Code 81332
G. Telephone Number (303) 967-2281
Area Code

Signature 
Title O. L. Jahnke
General Manager, Agent
Date April 23, 1979

RECEIVED

APR 26 1979

WATER QUALITY
CONTROL DIVISION

Permit No: CO-0029793

County: Dolores

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"), and the Colorado Water Quality Control Act (CRS, 1973 as amended, 25-8-101 et. seq.)

the Rico Argentine Mining Company,

is authorized to discharge from the mill located approximately one (1) mile upstream of Rico on Silver Creek, and from the Blaine Tunnel and St. Louis Tunnel,

to receiving waters named Silver Creek and Dolores River,

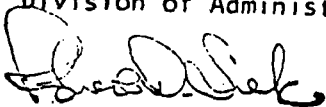
in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective thirty (30) days after the date of receipt of this permit by the Applicant.

This permit and the authorization to discharge shall expire at midnight, December 31, 1980.

Signed this 1st day of June, 1976

COLORADO DEPARTMENT OF HEALTH
Division of Administration



Robert D. Siek
Assistant Director, Department of Health
Environmental Health

CERTIFIED LETTER NO. 993152
DATE SIGNED 6-3-76
EFFECTIVE DATE OF
PERMIT 7-3-76

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning immediately, and lasting through June 30, 1977, the permittee is authorized to discharge from outfall(s) serial number(s) 001 and 002, the discharges from the Blaine Tunnel to Silver Creek and the St. Louis Tunnel to the Dolores River, respectively. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Weight		Concentration		Measurement Frequency	Sample Type
	kg/day (lbs/day)		mg/l	mg/l		
	30-day Avg <u>a/</u>	Daily Max <u>b/</u>	30-day Avg <u>a/</u>	Daily Max <u>b/</u>		
Flow-m ³ /Day (MGD)	N/A	N/A	N/A	N/A	Weekly	Instantaneous <u>c/</u>
Total Suspended Solids	N/A	N/A	50	100	Weekly	Composite
Total Copper	N/A	N/A	N/A	N/A	Monthly	Grab
Total Zinc	N/A	N/A	N/A	N/A	Monthly	Grab
Total Lead	N/A	N/A	N/A	N/A	Monthly	Grab
Total Mercury	N/A	N/A	N/A	N/A	Monthly	Grab

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored monthly by either in-situ or grab sample, measurement being in the field.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the respective outfalls from the Tunnels, following the last treatment unit and prior to mixing with the receiving waters.

a/ This limitation shall be determined by the arithmetic mean of a minimum of three (3) consecutive samples taken on separate weeks in a 30-day period (minimum total of three (3) samples);

b/ This limitation means the total discharge by weight, or the average concentration, during any calendar day.

c/ See Part III, B.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

2. During the period beginning July 1, 1977, and lasting through December 31, 1980, the permittee is authorized to discharge from outfall(s) serial number(s) 001, the Blaine Tunnel discharge to Silver Creek.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Weight		Concentration		Measurement Frequency	Sample Type
	kg/day (lbs/day)		mg/l	mg/l		
	30-day Avg <u>a/</u>	Daily Max <u>b/</u>	30-day Avg <u>a/</u>	Daily Max <u>b/</u>		
Flow-m ³ /Day (MGD)	N/A	N/A	N/A	N/A	Weekly	Instantaneous <u>c/</u>
Total Suspended Solids	N/A	N/A	20	30	Weekly	Composite
Total Copper	N/A	N/A	N/A	0.01	Monthly	Composite
Total Zinc	N/A	N/A	N/A	0.25	Monthly	Composite
Total Lead	N/A	N/A	N/A	0.03	Monthly	Composite
Total Mercury	N/A	N/A	N/A	0.0002	Monthly	Composite

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored monthly by either in-situ or grab sample, measurement being in the field.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall from Blaine Tunnel, following the last treatment unit and prior to mixing with the receiving waters.

a/ This limitation shall be determined by the arithmetic mean of a minimum of three (3) consecutive samples taken on separate weeks in a 30-day period (minimum total of three (3) samples);

b/ This limitation means the total discharge by weight, or the average concentration, during any calendar day.

c/ See Part III, B.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

3. During the period beginning July 1, 1977, and lasting through December 31, 1980, the permittee is authorized to discharge from outfall(s) serial number(s) 002, the St. Louis Tunnel discharge to the Dolores River.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Weight kg/day (lbs/day) 30-day Avg <u>a/</u>	Concentration mg/l Daily Max <u>b/</u>	Measurement Frequency	Sample Type
Flow-m ³ /Day (MGD)	N/A	N/A	Weekly	Instantaneous <u>c/</u>
Total Suspended Solids	N/A	20	Weekly	Composite
Total Copper	N/A	0.05	Monthly	Composite
Total Zinc	N/A	0.5	Monthly	Composite
Total Lead	N/A	N/A	Monthly	Composite
Total Mercury	N/A	N/A	Monthly	Composite

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored monthly by either in-situ or grab sample, measurement being in the field.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall from St. Louis Tunnel, following the last treatment unit and prior to mixing with the receiving waters.

a/ This limitation shall be determined by the arithmetic mean of a minimum of three (3) consecutive samples taken on separate weeks in a 30-day period (minimum total of three (3) samples);

b/ This limitation means the total discharge by weight, or the concentration, during any calendar day.

c/ See Part III, B.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

4. During the period beginning immediately, and lasting through December 31, 1980, the permittee is authorized to discharge from outfall(s) serial number(s) 003, the flotation mill discharge to Silver Creek.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Weight		Concentration		Measurement Frequency	Sample Type
	kg/day (lbs/day)		mg/l	mg/l		
	30-day Avg <u>a/</u>	Daily Max <u>b/</u>	30-day Avg <u>a/</u>	Daily Max <u>b/</u>		
Flow-m ³ /Day (MGD)	N/A	N/A	N/A	N/A	Weekly	Instantaneous <u>c/</u>
Total Suspended Solids	N/A	N/A	20	30	Weekly	Composite
Total Copper	N/A	N/A	N/A	0.01	Monthly	Composite
Total Zinc	N/A	N/A	0.20	0.25	Weekly	Composite
Total Lead	N/A	N/A	N/A	0.03	Monthly	Composite
Total Mercury	N/A	N/A	N/A	0.0002	Quarterly	Composite
Total Cadmium	N/A	N/A	N/A	0.003	Quarterly	Composite
Total Cyanide	N/A	N/A	0.01	0.02	Weekly	Composite
Free Cyanide	N/A	N/A	N/A	0.005	Monthly	Composite

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored weekly by either in-situ or grab sample, measurement being in the field.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall from the final treatment unit prior to mixing with the waters of Silver Creek.

- a/ This limitation shall be determined by the arithmetic mean of a minimum of three (3) consecutive samples taken on separate weeks in a 30-day period (minimum total of three (3) samples);
- b/ This limitation means the total discharge by weight, or the concentration, during any calendar day.
- c/ See Part III, B.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

5. Effective immediately, the permittee is directed to have no discharge from the heap leaching operation, including the leaching heaps and all appurtenances to or processing facilities associated with said operation.
6. No discharge is authorized by this permit for any other discharge points, including other mine drainages, wells, or produced waters resulting from exploration practices. The permittee shall file separate applications or amendments to the existing permit application for any such existing or anticipated additional discharges.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 22th day of the month following the completed reporting period. The first report is due on July 28, 1976. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the State at the following addresses:

Colorado Department of Health
Water Quality Control Division
4210 East 11th Avenue
Denver, Colorado 80220

U.S. Environmental Protection Agency
1860 Lincoln Street - Suite 900
Denver, Colorado 80203
Attention: Enforcement - Permit Program

3. Definitions

- a. A "composite" sample, for monitoring requirements, is defined as a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.
- b. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- c. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement using existing monitoring facilities.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Act, and Colorado State Effluent Limitations (400), under which such procedures may be required.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling;
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;

- d. The analytical techniques or methods used; and
- e. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA No. 3320-1). Such increased frequency shall also be indicated.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Regional Administrator of the State water pollution control agency.

C. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

The permittee shall submit to the permit issuing authority in less than ninety (90) days after the issuance of this permit, an implementation plan for an abatement program designed to achieve the effluent limitations specified in this permit for discharge from outfall(s) 001 and 002. The implementation plan shall consist of an outline of intended design, construction and operation, including a compliance schedule setting forth the dates by which compliance with the effluent limitations will be reached. The compliance schedule shall include, where appropriate, dates to accomplish the following:

- (a) completion of preliminary plans no later than April 1, 1976;
- (b) completion of final plans no later than July 1, 1976;
- (c) award of contract(s), as appropriate;
- (d) commencement of construction, as appropriate;
- (e) completion of major construction phases, as appropriate;
- (f) completion of all construction, as appropriate;
- (g) attainment of operational level no later than July 1, 1977.

Upon approval of the implementation plan by the permit issuing authority, the schedule of compliance shall become conditions of this permit.

2. No later than fourteen (14) calendar days following a date identified in the above schedule of compliance, or in any schedule of compliance submitted in fulfillment of the conditions of this permit (III, D.3.), the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with any maximum effluent limitation specified in this permit the permittee shall provide the Regional Administrator and the State with the following information, in writing, within five (5) days of becoming aware of such condition:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing (see additional requirements under Part III)

Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Regional Administrator and the State in writing of each such diversion or bypass.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering State waters.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

8. Any discharge to the waters of the State from a point source other than specifically authorized is prohibited.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the head of the State water pollution control agency, the Regional Administrator, and/or their authorized representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in the permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the State water pollution control agency.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the Act and Regulations for the State discharge permit system (506), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the

State water pollution control agency and the Regional Administrator. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act, and CRS (1973) 25-8-610.

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Part II, A-5) and "Power Failures" (Part II, A-7), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

9. *Property Rights*

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. *Severability*

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART III

OTHER REQUIREMENTS

A. Additional Bypassing Requirements

If, for other reasons, a partial or complete bypass is considered necessary, a request for such bypass shall be submitted to the State of Colorado and to the Environmental Protection Agency at least sixty (60) days prior to the proposed bypass. If the proposed bypass is judged acceptable by the State of Colorado and by the Environmental Protection Agency, the bypass will be allowed subject to limitations imposed by the State of Colorado and the Environmental Protection Agency.

If, after review and consideration, the proposed bypass is determined to be unacceptable by the State of Colorado and the Environmental Protection Agency, or if limitations imposed on an approved bypass are violated, such bypass shall be considered a violation of this permit; and the fact that application was made, or that a partial bypass was approved, shall not be a defense to any action brought thereunder.

PART III

Page 14 of 16
Permit No. CO-0029793

OTHER REQUIREMENTS (Continued)

B. General

At the request of the Regional Administrator of the Environmental Protection Agency or the Director of the State Water Quality Control Division, the permittee must be able to show proof of the accuracy of any flow-measuring device used in obtaining data submitted in the monitoring report. The flow-measuring device must indicate values within ten percent of the actual flow being measured.

The limitations stated in Part I, Section A, are calculated on the basis of gross measurements of each parameter in the designated discharge regardless of the quantity and quality of these parameters in the plant inflow.

If the permittee desires to continue to discharge, he shall reapply at least 180 days before this permit expires.

Within 60 days of the issuance of this permit, the permittee shall file a statement with the Environmental Protection Agency and the State of Colorado which shall contain the names of the person or persons who are designated to report conditions as noted in Part II, Section A, Paragraph 2a (Noncompliance Notification), and as noted in Part II, Section B, Paragraph 7 (Oil and Hazardous Substance Liability).

Within three (3) months after the date of permit issuance, a flow-measuring device shall be installed at each discharge point to give accurate measurement of the effluent flow rate(s).

OTHER REQUIREMENTS (Continued)

C. Testing

Test procedures shall conform with those procedures specified in the Federal Register, Volume 38, Number 199, October 16, 1973. These procedures involve the use of one of the following references:

1. "Standard Methods for the Examination of Water and Waste Water," 13th Edition, 1971.
2. "ASTM," Annual Book of Standards, Part 23, Water, Atmosphere Analysis, 1973.
3. "Methods for Chemical Analysis of Water and Wastes," 1971, Environmental Protection Agency.

OTHER REQUIREMENTS (Continued)

D. Mine and Mineral Processing Solid Wastes

1. General

Tailings, spoil, and all other mining and mineral processing solid or slurry wastes shall be disposed of in a manner so as to prevent any pollutant from such materials from entering and polluting the waters of the State of Colorado.

2. Tailings

No tailings shall be deposited by the permittee in any tailings disposal facility, new or existing, prior to sixty (60) days following submittal to the permit issuing authority by the permittee, of a certified document, signed and sealed by a Professional Engineer registered in the State of Colorado, who is competent in the field of dam and embankment stability. Said document shall provide detailed evidence of field investigation(s) of said facilities and a stability and seepage analysis. Said document shall state the maximum allowable height (elevation) and volume of each tailing facility. It shall identify existing heights (elevations) and volumes of stored materials and the physical/chemical characteristics of those materials existing and intended to be deposited that relate to the embankment stability, seepage and pollutional characteristics of any seepage from such facilities. The stability analysis shall evaluate the potential of failure due to flood, landslide, seismic activity, erosion, and failure of adjacent or nearby facilities, and it shall identify the safety factor obtained for each analysis of each structure. For any structure found to be structurally unsuitable under its existing condition, or under conditions anticipated to occur during operation or retirement, specific plans for remedial measures to upgrade said structures shall be prepared and submitted as a part of the documentation required.

3. Remedial Measures

Specific plans for remedial measures or construction as identified above (III, D.2.) shall be submitted by the permittee with an implementation plan and schedule of compliance for their completion. Such remedial measures shall be completed prior to utilization of any tailings disposal facility to receive additional tailings. Upon approval of the implementation plan by the permit issuing authority, the schedule of compliance shall be a condition of this permit.

4. Stabilization Plan

The permittee shall submit to the permit issuing authority detailed and documented evidence of the existence of and submittal to proper authorities in the State of Colorado, a reclamation/stabilization plan for all disturbed areas that have resulted from the permittee's activities since July 1, 1969.

COLORADO DEPARTMENT OF HEALTH
Division or Section of Water Quality Control

INTER-OFFICE COMMUNICATION

TO : Sharon Metcalf

DATE : May 20, 1980

FROM: Bob Shukle

SUBJECT: Rico Argentine Mining Co.,
Permit #CO-0029793 - Com-
pliance Schedule on NOV

The following is the compliance schedule that should be incorporated into the NOV of discharge 002.

1. Install flow monitoring device at outfall of last pond. July 1, 1980
2. Confine 002 discharge to a single point. July 1, 1980
3. Propose a program, for Division approval, to bring discharge into compliance. The program should include a schedule of implementation. July 15, 1980
4. Propose a monitoring program, for Division approval, on the Dolores River that will demonstrate any impact of the ponds on the river. The program shall include frequency, parameters and shall be implemented within 15 days of program approval. July 1, 1980
5. The Discharge Monitoring Reports shall be completed and submitted as per the permit.
6. To notify this Division within 10 days after receipt of this order as to the intent to comply with this compliance schedule.

RJS:ef


Signature

COLORADO DEPARTMENT OF HEALTH
Division or Section of Water Quality Control

INTER-OFFICE COMMUNICATION

TO : Sharon Metcalf

DATE : May 20, 1980

FROM: Bob Shukle

SUBJECT: List of Violations

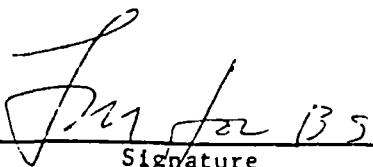
The following is a summary of permit violations for discharge oo2 at the Rico Argentine facility.

3 in 30	4-18-78, 9-25-78, 10-2-78	Zn 0.79, 0.92, 0.99 limit 0.5/1.0
3 in 30	5-9-79, 5-22-79, 5-31-79, 5-22-79	Zn 2.7, 3.0, 5.0 - limit .05/1.0 Hg .0006 limit .0002
self-mon- itoring	12-12-79, 12-17-79, 12-27-79 1-3-80, 1-14-80, 1-22-80 2-4-80, 2-15-80, 2-25-80	Zn 1.08, 0.35, 1.00 - limit 0.5/1.0 Zn 0.97, 0.42, 1.17 - limit 0.5/1.0 Zn 0.75, 0.63, 0.43 - limit 0.5/1.0
DMR	4-1/7-1-79 Zn avg - 9.10 Max 10.4 - limit 0.5/1.0 7-1/10-1/79 Zn avg - 0.63 limit 0.5/1.0 Cu max - 0.605 limit .05/.09 1-1/4-1-80 inadequate report form. Refer to May 6, 1980 memo from Stan May	

Unauthorized discharge - seepage from settling pond. Refer to
Jan. 11, 1979 memo from Pete Mars on
dates of observation.

No flow monitoring device - refer to Mr. Jahnke's letter of May 5, 1980.

RJS:ef


Signature

INTER-OFFICE COMMUNICATION

TO: Fred Hinman

DATE: May 6, 1980

FROM: Stanley V. May

RE: Violation of NPDES
Permit No. CO-0029793,
Dolores County.

The following permit violations were reported by Rico Argentine Mining Co.
on their Discharge Monitoring Report for the reporting period of 1-1/4-1-80.
Unless you have specific objections, I intend to ask the permittee for an explanation and corrective action.

1. Failed to report Flow, Number of Exceptions, Frequency of Analysis and Sample Type.
2. It appears that permittee is not taking required number of samples.
- 3.
- 4.

Please return this IOC with your comments prior to May 28, 1980.

SVM:vta



Stanley V. May

Date

COMMENTS:

D.E. Signature

Date

File Copy
Transmittal I.O.C.

September 13, 1979

Mr. O. L. Jahnke, General Manager
Rico Argentine Mining Company
P. O. Box 156
Rico, CO 81332

RE: September 6, 1979

Permit No. CO-0029793
Dolores County

Dear Mr. Jahnke:

The referenced meeting was a result of effluent violations from September 1978 and May 1979. As was agreed to in the meeting, the following will be performed:

1. Discharge 002 will be confined to a single point equipped with an acceptable flow monitoring device. This will in part require elimination of seepage from the ponds. The work will be completed within 45 days.
2. Physical attempts at pH adjustment for removal of zinc will be made to bring the discharge into compliance with the permit immediately. These attempts will include piping of the artesian water into the series of ponds, such that optimum treatment results. This will require sufficient sampling to verify results and may require alteration of the point of addition and/or volumes of artesian water. It will also require flow measurement at the time of sampling so it can be determined if there is actual treatment or simply dilution, the latter of which is not acceptable. This work was agreed to be completed within 60 days.

Prepared by: _____

Date: _____

Executive Director's Action: _____

Approved by: _____

Date: _____

Signed: _____

Returned unsigned: _____

Legal Concurrence: _____

Date: _____

Date Mailed: _____

Date: _____

File Copy

Transmittal I.O.C.

Mr. O. L. Jahnke
September 13, 1979
Page 2

3. A sampling program on the Dolores River was to be implemented which would show any impact of the pond system on the river. The sampling points were to be determined via consultation with Fred Hinman. Though possibly not completed by November 15, the program was agreed to be implemented by that date.
4. As a lower priority item, drainage within the mine was to be investigated for possible diversion, piping etc. around mineralized areas contributing to metals contamination. A time frame was not specified, but it is assumed that work in this area may be delayed until winter, when the other items will be difficult or impossible to address.
5. Because of the possibility that underground work in 1978 resulted in increased levels of zinc and copper in the discharge, it was agreed that the Division would be advised prior to any such activity in the future. In addition, the Division should be advised on any surface activity, such as removal of the iron material, which may impact the quality of the discharge.

Though not discussed at the meeting, it is requested that the Division be advised in writing when Item 1 is completed as well as supplied with analytical data developed for the other items, as it becomes available. In addition, in order that excessive delays be avoided, the Division requests that another meeting be scheduled for 10:00 November 20, to discuss the results of the studies. The Division also requests a copy of the water quality study performed by Anaconda, when it becomes available.

Prepared by: _____

Date: _____

Executive Director's Action: _____

Approved by: _____

Date: _____

Signed: _____

Returned unsigned: _____

Legal Concurrence: _____

Date: _____

Date Mailed: _____

Date: _____

File Copy

Transmittal I.O.C.

Mr. O. L. Jahnke
September 13, 1979
Page 3

The Division will determine enforcement action to be taken on permit violations at a later date after observing the above progressive steps to bring the present system into compliance with permit conditions. Prompt and continued compliance with permit conditions is the Division's objective and it is felt that implementation of the above items are a progressive step. If the above steps do not appear to be accomplishing the Division's objectives, alternate means should be proposed by Rico Argentine for approval of the Division. Following approval, prompt evaluation and/or implementation should follow.

If there are any questions, please contact this Division.

Very truly yours,

Fred Matter, P.E., Chief
Monitoring & Enforcement Section
WATER QUALITY CONTROL DIVISION

FH/RJS/ddb

Prepared by: RS
Date: 9/13/79
Executive Director's Action:

Approved by: _____
Date: _____
Signed: _____
Returned unsigned: _____
Legal Concurrence: _____
Date: _____
Date Mailed: _____
Date: _____

RICO ARGENTINE MINING CO.

AREA CODE 303-967-2281

P.O. BOX 158

RICO, COLORADO 81332

RECEIVED
MAY 08 1980
WATER QUALITY
CONTROL DIVISION

May 5, 1980

Mr. Fred Matter, P. E., Chief
Monitoring & Enforcement Section
Water Quality Control Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Dear Mr. Matter;

To comply with your request I wish to present the following
information on the St. Louis Tunnel discharge;

A sample data plan of taking water samples of once per week was
scheduled upon my return from your meeting in Denver. Sampling points
as; St. Louis Tunnel, river points above, middle and below decantation
ponds, well water and pond weir on discharge.

Samples were taken by me and assayed by Commercial Testing of
Golden.

RICO ARGENTINE MINING CO.

AREA CODE 303-967-2281

P.O. BOX 158

RICO, COLORADO 81332

Mr. Fred Matter

May 5, 1980

Page -2-

DATE	POND DISCHARGE	WELL	Ph WELL	Ph DISCHARGE	ZN ASSAY TUN.	DISH.
11/26	637	133	8.0	7.5	2.73	0.05
12/4	651	140	8.0	7.4	2.92	0.24
12/12	738	130	7.9	7.3	2.80	1.03
12/17	680	125	8.0	7.4	3.00	0.35
12/27	750	130	7.9	7.3	3.16	1.00
1/3	826	140	7.9	7.3	2.97	0.97
1/14	725	130	8.0	7.2	2.83	0.42
1/22	730	130	7.9	7.2	2.98	1.17
2/4	680	130	8.0	7.3	2.77	0.73
2/15	720	125	8.1	7.2	2.60	0.63
2/25	700	130	8.0	7.3	2.35	0.43
3/5	745	130	8.0	7.2	2.84	0.10
3/15	780	140	8.1	7.2	2.98	0.12
3/25	820	140	8.0	7.3	2.77	0.32
4/4	860	130	8.1	7.2	2.83	0.35
4/18	870	130	8.0	7.3	2.97	0.83

Handwritten notes on the right side of the table:

- 1.03, 1.00, 0.97, 1.17, 0.73, 0.63 are circled.
- 0.35, 0.42, 0.43, 0.32, 0.35, 0.83 are circled.
- Brackets group the circled values: 1.03, 1.00, 0.97, 1.17, 0.73, 0.63 are grouped by a bracket labeled "avg. 81". 0.35, 0.42, 0.43, 0.32, 0.35, 0.83 are grouped by a bracket labeled "avg. 82".

Samples taken to 4/18 show an average assay of ;

745 gpm Discharge---Pond

131 gpm Discharge---Well

8.0 Ph Well

7.23 Ph Discharge Pond

2.85 ppm Zn St. Louis Tunnel

0.55 ppm Zn Pond Discharge

RICO ARGENTINE MINING CO.

AREA CODE 303-967-2281

P.O. BOX 158

RICO, COLORADO 81332

Mr. Fred Matter

May 5, 1930

Page -3-

The well water was introduced to the pond prior to our meeting in Denver at point #A as indicated.

Because of the well failure, the point of induction was moved to point #B as indicated.

Because of pipe failure due to pipe fatigue, the point of discharge was moved to point #C, which to date is still at the same location.

Discharge water was measured by a Cipolletti Weir, which was placed at point WA and WB and WC as indicated; however, due to beaver problems point WA and point WC were abandoned. Well water was physically measured by container-time-measurements.

The measurements seem to be fairly consistant as a result the well measurement has been dropped.

The average well water indicates the following;

Cu	0.005 mg/l
Pb	0.03
Zn	0.005
Hg	≤ 0.03 ug/l
Ph	8.0

The average St. Louis discharge assayed as;

Cu	0.08 mg/l
Pb	0.06
Zn	2.92
Hg	≤ 0.03 ug/l
Ph	7.2

RICO ARGENTINE MINING CO.

AREA CODE 303-967-2281

P.O. BOX 158

RICO, COLORADO 81332

Mr. Fred Matter

May 5, 1930

Page -4-

The average pond discharge assayed as;

Cu	0.008 mg/l
Pb	0.03
Zn	0.55
Hg	≤ 0.03 ug/l

We are still taking samples on a regular basis and will continue until a set pattern can be established on a better system of correction can be installed or revised. We definitely have determined that temperature relative to Ph is the control on our discharge.

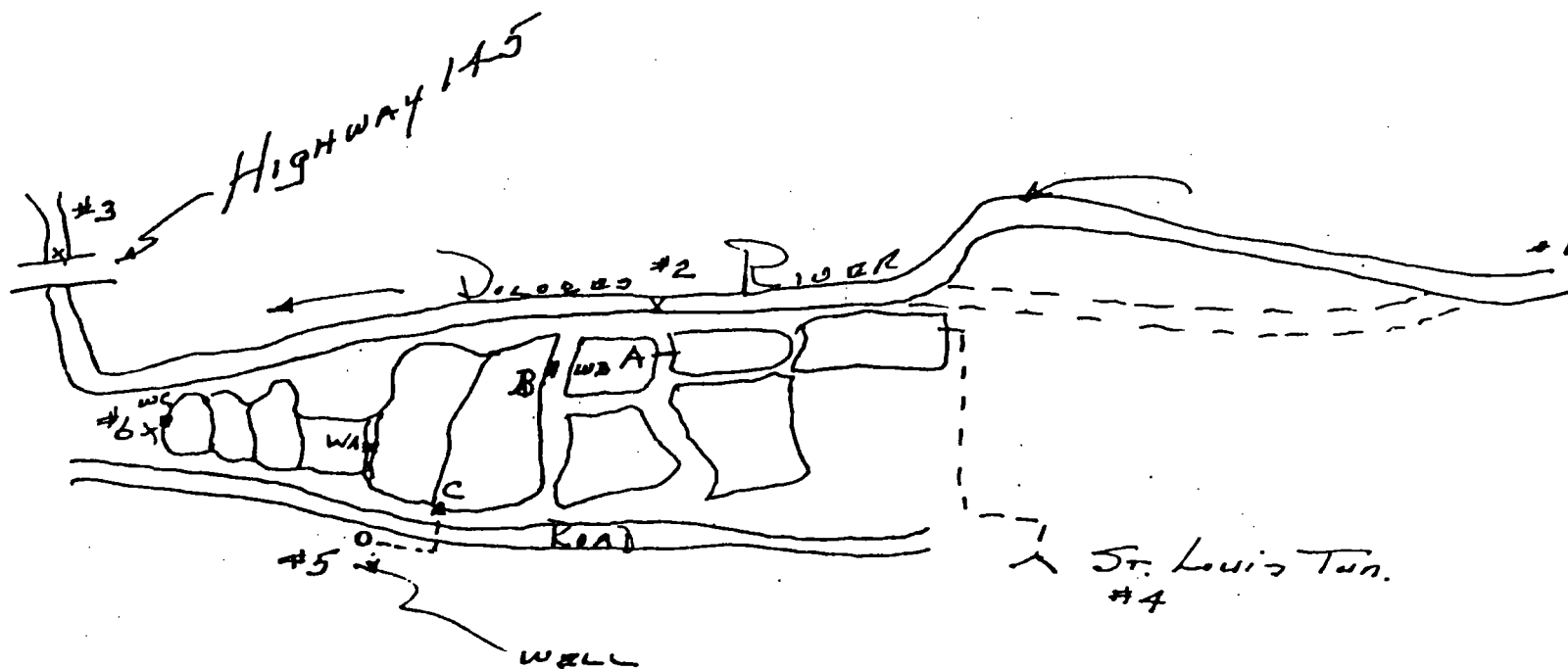
Very truly yours,


O. L. JAHNKE
General Manager

OLJ/mj

Enclosures. (2)

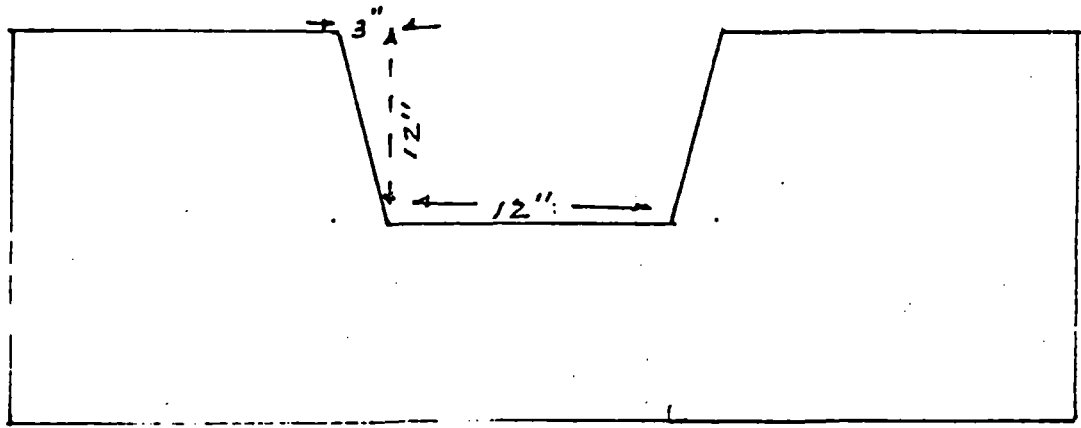
cc - Sharon Metcalf
Fred Hinman
Robert Shukle



Scale - none

→ N

C. POLLETTI WEIR



$$26.4 (H)^{1.5} \text{ g.f.m.}$$

H	
1	26.4
2	74.67
3	137.18
4	211.20
5	295.16
6	388.0
7	488.93
8	597.36
9	712.80
10	834.84

WQC

INTER-OFFICE COMMUNICATION

TO : File

DATE : 10/3/78

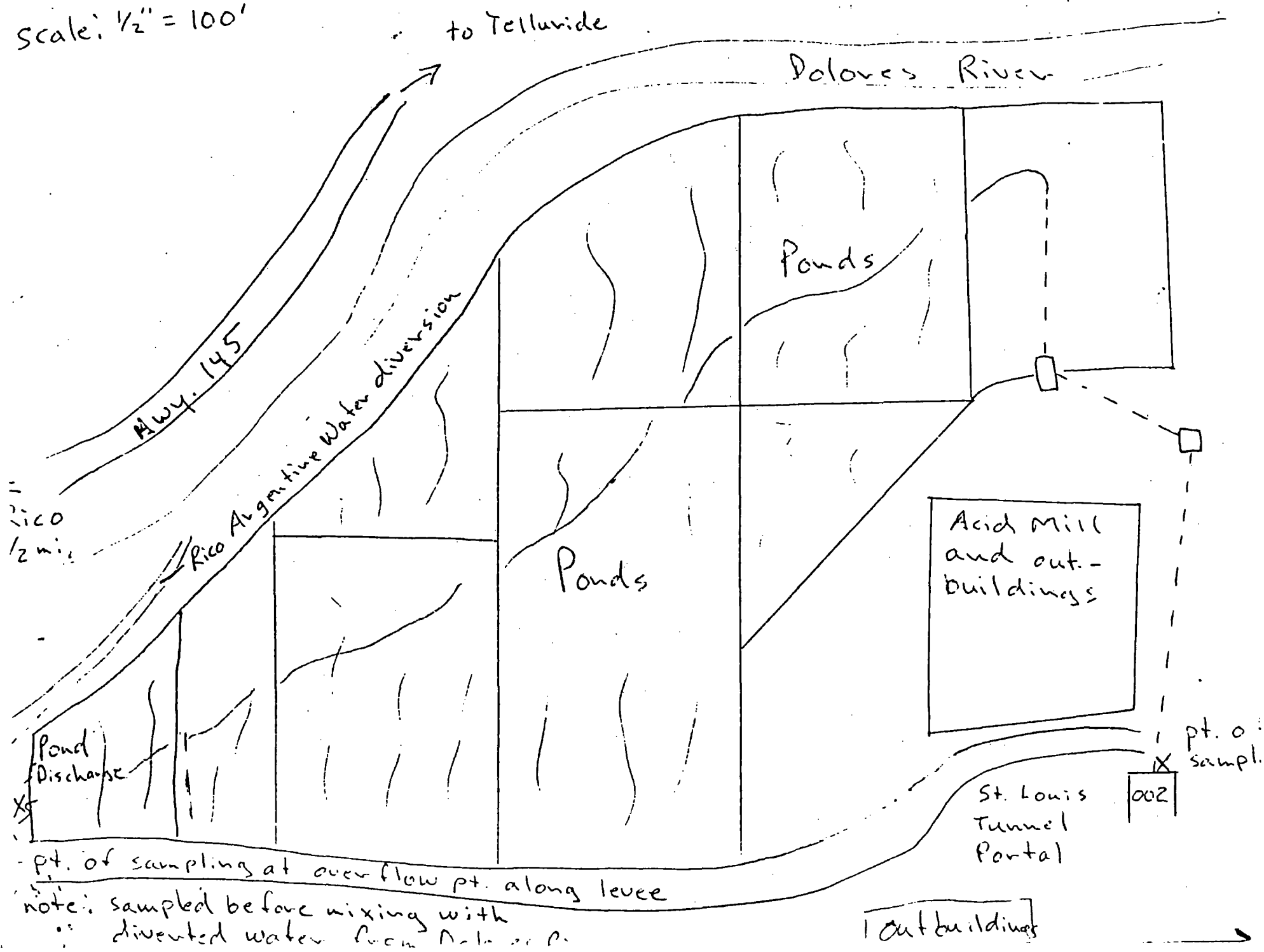
FROM: Dennis Plog, Engr. Aide A SUBJECT: Rico Argentine Mining Co.

On 9/18/78 I took the 1st of 3 enforcement samples at the Rico Argentine Mining Co., Rico, Co. After stopping at the office in Rico, I and Chester Towne, Foreman, up Silver Creek at the towns water supply diversion project. Chester Towne accompanied me to all four potential discharges. The situation at each potential discharge remained constant during the enforcement series. 001 - Blaine Tunnel Portal, discharge to Silver Crk. - No discharge. Chester Towne informed me that the Blaine tunnel water was being diverted via mine shafts to the St. Louis Tunnel. 002 - St. Louis Tunnel Portal, discharge to ponds along Dolores River. 003 - Flotation Mill, discharge to Silver Crk. - No Discharge. Pond discharge to Dolores River; diffuse over top and through sides of Pond levees. (see attached map)

Signature

Dennis J. Plog

Scale: $\frac{1}{2}'' = 100'$





COLORADO DEPARTMENT OF HEALTH

4210 EAST 11TH AVENUE • DENVER, COLORADO 80220 • PHONE 388-6111

Anthony Robbins, M.D., M.P.A. Executive Director

MEMORANDUM

TO: Stan May
FROM: Dennis Plog
DATE: January 10, 1979

SUBJECT: RICO ARGENTINE ENFORCEMENT SAMPLING

On 9/17/78, 9/25/78, and 10/2/78, I collected enforcement samples at Rico Argentine Mining Co., Rico, Colorado. The discharge situation was the same on all three dates. (Refer to enclosed map)

001-BLAINE TUNNEL

There was no discharge, nor any evidence of a discharge in the recent past. Mr. Orville Jahnke, Manager, stated that the water in the Blaine Tunnel was being diverted, through underground mine shafts, to the St. Louis Tunnel.

002-ST. LOUIS TUNNEL

There was a high volume of turbid water discharging from the portal. This water flowed west through a culvert (under a private road), and then west in a ditch to the upper end (North) of the settling pond system. Composite samples were collected at the portal.

003-FLOATATION MILL

The floatation mill was not in operation, and Mr. Orville Jahnke, Manager, stated that it had not been in operation for quite some time. The tailings ponds were dry and there was no discharge. Localized natural runoff may cause leaching or a discharge to occur at certain times of the year.

EVIDENT NON-PERMITTED DISCHARGE (END OF SETTLING POND SYSTEM)

There was a discharge from a non-structural overflow of the bottom (most southerly) settling pond. The discharge was clear and a fairly constant volume of flow was observed on the three sampling dates. This flow was significantly less than the flow from the St. Louis Portal, which enters at the top (north) end of the settling pond system. I did not personally observe any additional seepages or overflows from the settling pond system in the immediate vicinity of the sample location. Composite samples were collected at this location.

CONTACT OR OWNER OF FACILITY:

TYPE OF FACILITY:

SYSTEM:

COUNTY: Dolores

LOCATION OF FACILITY:

RICO ARGENTINE MINING COMPANY
Post Office Box 158
Rico, Colorado 81432

CO-0029793

POND DISCHARGE

- 002 -

PERMIT EFFLUENT LIMITATIONS													
Effective Date: 7-1-77						6/9		0.05				20/30	
Expiration Date: 12-31-80								0.09				0.2	
										0.5/1.0		.0002	
DATE SAMPLED	TIME(S) SAMPLED	Sample Type	Flow (MGD)	Temperature of	pH (S.U.)	Dissolved Oxygen (mg/l)	Copper mg/l	Iron mg/l	Oil & Grease (mg/l)	Suspended Solids (mg/l)	Lead mg/l	Zinc mg/l	Mercury mg/l
5-18-78	1155-1655	comp	1.0	51.8	7.0	7.0	.005		2.8	< 5	.006	.79	0
5-25-78	1100-1600	comp	1.5	57.2	7.0	6.6	.005			20	0	.92	0
10-2-78	1045-1545	comp	2.0	59.0	7.1	6.8	.005			10	0	.99	0
5-9-79	1050-1550	comp	1.0	39.2	7.0	8.7	.033	1.3		10	.011	2.7	<.0005
5-22-79	1030-1530	comp	1.0	59.0	7.0	8.8	.022	1.1	<10	10	.009	3.0	.0006
5-31-79	1000-1500	comp	1.0	55.4	7.1	8.2	.008			10	<.009	5.0	<.0005

Note: Those values circled are those higher than Permit limits.

< Less than

> More than

DISTRIBUTION LIST: District Engineer,

U.S. Environmental Protection Agency: Ken Alkema

Water Quality Control

Fred Matter

Pete Mars

January 11, 1979

Seepage from settling ponds at
Rico-Argentine Mining Company

Per your memo of January 10, 1979, I observed seepage coming through the embankment on the last two settling ponds on the below listed dates. (See attached sketch.)

5-16-78
5-31-78
6-07-78
6-21-78
7-06-78
7-11-78
7-26-78
8-28-78

JPM:ef

cc - Sharon Metcalf

1N

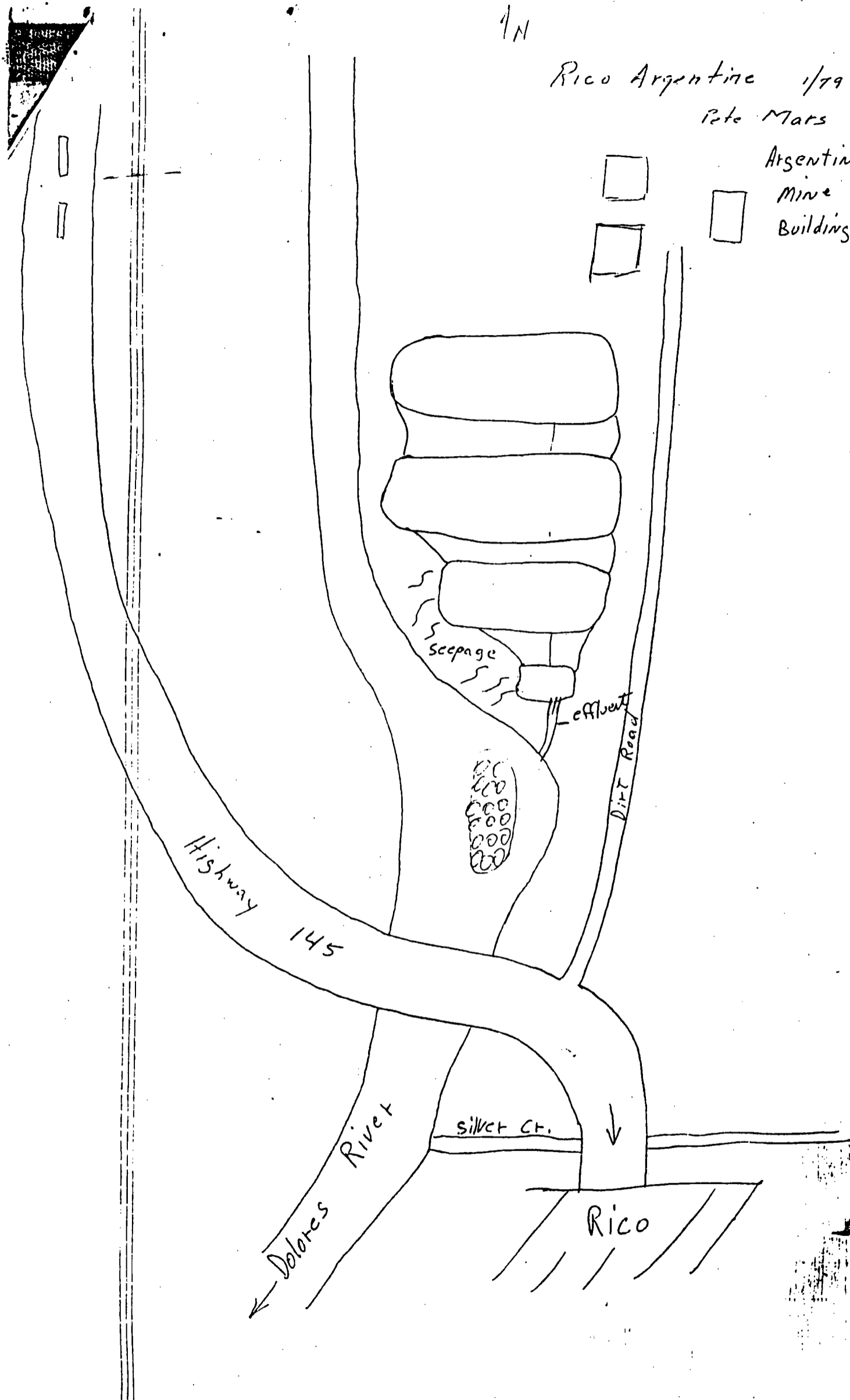
Rico Argentine 1/79

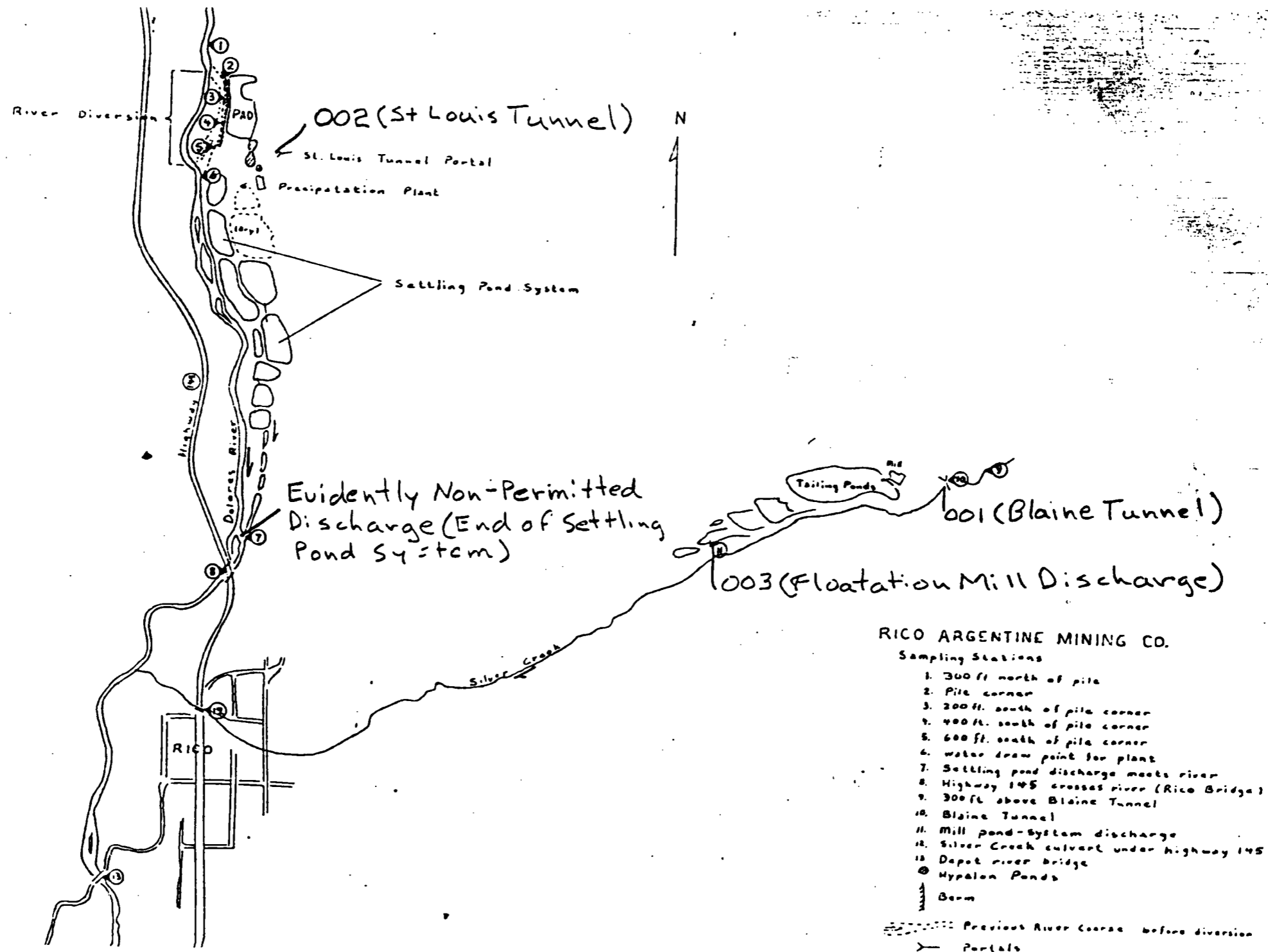
Pete Mars

Argentine

Mine

Buildings





CO 81332

ST 29793 PERMIT NUMBER

DIS 1031 SIC

LATITUDE LONGITUDE

REPORTING PERIOD: FROM 7/9 1/4 1/1 TO 7/9 1/7 1/1

YEAR MO DAY

1. Enter values in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
2. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
3. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
4. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
5. Appropriate signature is required on bottom of this form.
6. Remove carbon and retain copy for your records.
7. Fold along dotted lines, staple and mail Original to office specified in permit.

PARAMETER		(3 card only)				UNITS	NO. EX	(4 card only)				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM				MINIMUM	AVERAGE	MAXIMUM					
FLOW IN CONDUIT	REPORTED														
	PERMIT CONDITION													1/7	IN
SOLIDS, TOTAL SUSP (SUSPENDED)	REPORTED					MG/DAY			17	20					
	PERMIT CONDITION								20	30				1/7	CO
COPPER, TOTAL (AS CU)	REPORTED					MG/DAY			0.01	0.01					
	PERMIT CONDITION													1/30	CO
ZINC, TOTAL (AS ZN)	REPORTED					MG/DAY			9.10	10.4					
	PERMIT CONDITION													1/30	CO
LEAD, TOTAL (AS PB)	REPORTED					MG/DAY				0.05					
	PERMIT CONDITION													1/30	CO
MERCURY, TOTAL (AS HG)	REPORTED					MG/DAY				≤ 0.0001					
	PERMIT CONDITION													1/30	CO
H. FIELD	REPORTED					SU		7.0		7.2					
	PERMIT CONDITION													1/30	GR
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER
Jahnke Orval L.
LAST FIRST MI

TITLE OF THE OFFICER
General Manager
TITLE

DATE
9/7/16
YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
[Signature]

ST	0029793 PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE
REPORTING PERIOD: FROM		TO			
(20-21) (22-23) (24-25)		(26-27) (28-29) (30-31)			
79 17 11 YEAR MO DAY		79 11 11 YEAR MO DAY			

- ... the data specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
- Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
 - Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
 - Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
 - Appropriate signature is required on bottom of this form.
 - Remove carbon and retain copy for your records.
 - Fold along dotted lines, staple and mail Original to office specified in permit.

PARAMETER		(3 card only) QUANTITY (38-45) (46-53) (54-61)				(4 card only) CONCENTRATION (62-63) (38-45) (46-53) (54-61)				FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	AVERAGE	MAXIMUM			UNITS
FLOW IN CONDUIT	REPORTED											
50050	PERMIT CONDITION				MGD							
SOLIDS, TOTAL SUSP (SUSPENDED)	REPORTED							20			1/7	IN
60530	PERMIT CONDITION				KG/DAY			30			1/7	CO
TOPPER, TOTAL (AS CU)	REPORTED						0.005	0.605			1/30	CO
1142	PERMIT CONDITION				MG/DAY			0.005			1/30	CO
ZINC, TOTAL (AS ZN)	REPORTED						0.50	0.63			1/30	CO
31092	PERMIT CONDITION				KG/DAY			0.5			1/30	CO
LEAD, TOTAL (AS PB)	REPORTED							0.03			1/30	CO
1151	PERMIT CONDITION				MG/DAY			0.02			1/30	CO
MERCURY, TOTAL (AS HG)	REPORTED							0.00009			1/30	CO
119	PERMIT CONDITION				KG/DAY			0.00012			1/30	CO
H, FIELD	REPORTED						7.2	7.3			1/30	GR
31400	PERMIT CONDITION				SU			9.1			1/30	GR
	REPORTED											
	PERMIT CONDITION											

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER			DATE			I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Jahnke O. L.			General Manager			1 0 1 6 7 9				
LAST FIRST MI			TITLE			YEAR MO DAY				

REPORTING PERIOD: FROM

SIC		
(20-21)	(22-23)	(24-25)
8	1	1
YEAR	MO	DAY

TO

LATITUDE			LONGITUDE		
(26-27)	(28-29)	(30-31)	(32-33)	(34-35)	(36-37)
4	4	1	4	4	1
YEAR	MO	DAY	YEAR	MO	DAY

- Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
- Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
- Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous, enter "NA".
- Appropriate signature is required on bottom of this form.
- Remove carbon and retain copy for your records.
- Fold along dotted lines, staple and mail Original to office specified in permit.

PARAMETER		(3 card only)				UNITS	NO. EX	(4 card only)				UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		MINIMUM	AVERAGE	MAXIMUM	CONCENTRATION			MINIMUM	AVERAGE	MAXIMUM	CONCENTRATION				
FLOW IN CONDUIT	REPORTED														
60.150	PERMIT CONDITION					MGD								1/7	IN
SOLIDS, TOTAL SUSP (SUSPENDED)	REPORTED					MG/DAY			10	10					
0.53	PERMIT CONDITION								25	30				1/7	CO
UPPER, TOTAL (AS CU)	REPORTED					MG/DAY			0.02	0.02					
1.42	PERMIT CONDITION								0.05	0.09				1/30	CO
ZINC, TOTAL (AS ZN)	REPORTED					MG/DAY			0.37	0.63					
1.92	PERMIT CONDITION								0.5	1.0				1/30	CO
LEAD, TOTAL (AS PB)	REPORTED					MG/DAY				0.03					
1.51	PERMIT CONDITION									0.03				1/30	CO
MERCURY, TOTAL (AS HG)	REPORTED					MG/DAY				0.00005					
719.0	PERMIT CONDITION									0.00002				1/30	CO
CO-FIELD	REPORTED					SC									
04.0	PERMIT CONDITION									9.0				1/30	GR
	REPORTED														
	PERMIT CONDITION														

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER			DATE			I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
Jahnke	Orval	L.	General Manager			8	0	4		
LAST	FIRST	MI	TITLE			YEAR	MO	DAY		

COLORADO DEPARTMENT OF ALTH
Water Quality Control Division
4210 East 11th Avenue
Denver, Colorado 80220
(303)+320-8333, Ext. 3231

Rico Argentine Mining Co.
Mining Division of Crystal Exploration
& Production Company - NPDES PERMIT #CO-002979

APPLICATION FOR TRANSFER
AND ACCEPTANCE OF TERMS
OF NPDES PERMIT

I, Rico Argentine Mining Co. Mining Division of Crystal, am the new
Exploration and Production Company
owner of the following facility:

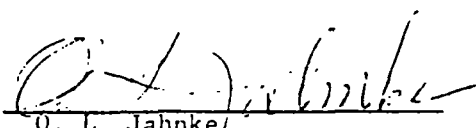
Mill located approximately one (1) mile upstream of Town of Rico
on Silver Creek, the Blaine Tunnel and St. Louis Tunnel.

I hereby apply for transfer to me of NPDES Permit No. CO- 0029793
which was issued to the previous owner. I have reviewed this permit and accept
its terms in full.

Please print or type

Name, address, and telephone number of the owner of the facility producing
discharge.

A. Owner Crystal Exploration and Production Company
B. Facility Name Rico Argentine Mining Company
C. Mailing Address P. O. Box 158
D. City Rico, D. State Colorado
E. County Dolores F. Zip Code 81332
G. Telephone Number (303) 967-2281
Area Code

Signature 
Title O. L. Jahnke/
General Manager, Agent
Date April 23, 1979

RECEIVED

APR 26 1979

WATER QUALITY
CONTROL DIVISION

RICO ARGENTINE MINING CO.

AREA CODE 303-967-2281

P.O. BOX 158

RICO, COLORADO 81332

April 6, 1979

Mr. Fred Matter, P. E., Chief
Monitoring and Enforcement Section
Colorado Department of Health
Water Quality Control Division
4210 E. 11th Avenue
Denver, Colorado 80220

RECEIVED
APR 12 1979
WATER QUALITY
CONTROL DIVISION

Dear Mr. Matter;

To clarify our present situation in ownership, the following
is true and correct:

Rico Argentine Mining Company merged with Crystal Oil Company
and formed the Rico Argentine Mining Company, a Texas corporation,
which in turn was merged with Crystal Exploration and Production
Company, a Florida corporation, with the survivor being the latter
and subsequently left Rico Argentine Mining Company a division of
the survivor. The total being a wholly owned subsidiary of Crystal
Oil Company, a Maryland corporation, 600 Ray P. Oden Building,
P. O. Box 21101, Shreveport, Louisiana 71120.

I am the Vice President and Agent for Rico Argentine Mining
Company, the Mining Division of Crystal Exploration and Production
Company.

Kindly send the necessary forms to this address in Rico and I
will expedite your request.

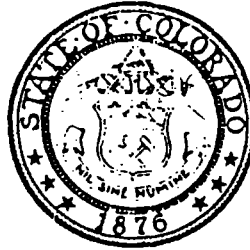
Very truly yours,

O. L. Jahnke
O. L. Jahnke
General Manager

OLJ:mj

cc: Fred Hinman, P. E., District Engineer

STATUTE OF COLORADO



DEPARTMENT OF
STATE

CERTIFICATE

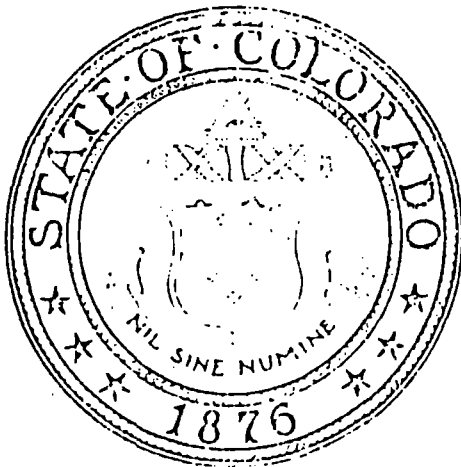
I, MARY ESTILL BUCHANAN, Secretary of State of the State of Colorado hereby certify that according to the records of this office, a certified copy of Articles of Merger of

RICO-ARGENTINE MINING COMPANY
(Texas Corporation)

merging into

CRYSTAL EXPLORATION AND PRODUCTION COMPANY
(Florida Corporation) the survivor

were filed on September 22, 1977.



DATED November 3, 1977

Mary Estill Buchanan

SECRETARY OF STATE

Certificate
Number C-2359

State of Colorado
DEPARTMENT OF REGULATORY AGENCIES

Not Transferable

SUBDIVISION DEVELOPERS
CERTIFICATE



Expires December thirty-first
1978

This is to certify that the person and/or entity with principal office address as shown below has been duly registered as a SUBDIVISION DEVELOPER in the State of Colorado for the calendar year 1978 as provided for by the Laws of Colorado.

RICO-ARGENTINE MINING DIVISION OF CEPCO
Orval L. Jahnke (Corp)
600 Oden Building
P. O. Box 21101
Shreveport, Louisiana 71120

Authorized by the
Real Estate Commission
WITNESS my hand and official seal at
Denver, Colorado, this

8th day of March, 1978

Keith T. Hooke
DIRECTOR

The Real Estate Commission must be notified of any change in the above address.

NOTICE

ALL REGISTERED SUBDIVISION DEVELOPERS WILL BE SENT RENEWAL NOTICES BEGINNING NOVEMBER 1978. THE RENEWAL NOTICES WHEN RECEIVED WILL BE THE ONLY FORM ACCEPTED FOR RENEWAL PURPOSES. THE RENEWAL FORM AND \$20.00 FEE MUST BE RECEIVED IN THE OFFICE OF THE REAL ESTATE COMMISSION BEFORE FEBRUARY 1, 1979 OR A NEW APPLICATION WILL BE REQUIRED.

DEPARTMENT OF LAW
Natural Resources Section
1525 Sherman, 3rd Floor
Denver, CO 80203

January 5, 1979

M E M O R A N D U M

TO: Fred Matter

FROM: Sharon Metcalf, *SM*

RE: Rico-Argentine

This is to confirm that I will hold off on preparing an NOV for Rico-Argentine pending receipt of information on bypasses of the ponds (the seepage). It is important to get a full listing of the days on which this was observed to occur, since each would constitute a separate day of violation. In this connection, you might wish to contact EPA to see if they have any observations they could testify about - or photos. (If they haven't been there since September of 1977, that is probably too old to bother with.)

The Division should consider alleging that these bypasses have been continuous since the day we first observed them - since I assume that is the nature of such seeps. From what I know at present, this would seem to be a preferable position to take.

When you give me final instructions on preparing the order, please be sure to specify what remedial actions should be taken.

SSM:vl

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

3. During the period beginning July 1, 1977, and lasting through December 31, 1980, the permittee is authorized to discharge from outfall(s) serial number(s) 002, the St. Louis Tunnel discharge to the Dolores River.
Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Weight kg/day (lbs/day) 30-day Avg <u>a/</u>	Daily Max <u>b/</u>	Concentration mg/l 30-day Avg <u>a/</u>	mg/l Daily Max <u>b/</u>	Measurement Frequency	Sample Type
Flow-m ³ /Day (MGD)	N/A	N/A	N/A	N/A	Weekly	Instantaneous <u>c/</u>
Total Suspended Solids	N/A	N/A	20	30	Weekly	Composite
Total Copper	N/A	N/A	0.05	0.09	Monthly	Composite
Total Zinc	N/A	N/A	0.5	1.0	Monthly	Composite
Total Lead	N/A	N/A	N/A	0.2	Monthly	Composite
Total Mercury	N/A	N/A	N/A	0.0002	Monthly	Composite

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored monthly by either in-situ or grab sample, measurement being in the field.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall from St. Louis Tunnel, following the last treatment unit and prior to mixing with the receiving waters.

a/ This limitation shall be determined by the arithmetic mean of a minimum of three (3) consecutive samples taken on separate weeks in a 30-day period (minimum total of three (3) samples);

b/ This limitation means the total discharge by weight, or the concentration, during any calendar day.

c/ See Part III, B.